- **4**. An antigen-binding molecule, optionally isolated, comprising (i) an antigen-binding molecule according to any one of claims **1** to **3**, and (ii) an antigen-binding molecule capable of binding to an antigen other than HER3.
- **5.** A chimeric antigen receptor (CAR) comprising an antigen-binding molecule according to any one of claims 1 to 4.
- 6. A nucleic acid, or a plurality of nucleic acids, optionally isolated, encoding an antigen-binding molecule according to any one of claims 1 to 4 or a CAR according to claim 5.
- 7. An expression vector, or a plurality of expression vectors, comprising a nucleic acid or a plurality of nucleic acids according to claim 6.
- 8. A cell comprising an antigen-binding molecule according to any one of claims 1 to 4, a CAR according to claim 5, a nucleic acid or a plurality of nucleic acids according to claim 6, or an expression vector or a plurality of expression vectors according to claim 7.
- **9.** A method comprising culturing a cell comprising a nucleic acid or a plurality of nucleic acids according to claim **6**, or an expression vector or a plurality of expression vectors according to claim **7**, under conditions suitable for expression of the antigen-binding molecule or CAR from the nucleic acid(s) or expression vector(s).
- 10. A composition comprising an antigen-binding molecule according to any one of claims 1 to 4, a CAR according to claim 5, a nucleic acid or a plurality of nucleic acids according to claim 6, an expression vector or a plurality of expression vectors according to claim 7, or a cell according to claim 8.
- 11. An antigen-binding molecule according to any one of claims 1 to 4, a CAR according to claim 5, a nucleic acid or a plurality of nucleic acids according to claim 6, an expression vector or a plurality of expression vectors according to claim 7, a cell according to claim 8, or a composition according to claim 10 for use in a method of medical treatment or prophylaxis.
- 12. An antigen-binding molecule according to any one of claims 1 to 4, a CAR according to claim 5, a nucleic acid or a plurality of nucleic acids according to claim 6, an expression vector or a plurality of expression vectors according to claim 7, a cell according to claim 8, or a composition according to claim 10, for use in a method of treatment or prevention of a cancer.
- 13. Use of an antigen-binding molecule according to any one of claims 1 to 4, a CAR according to claim 5, a nucleic acid or a plurality of nucleic acids according to claim 6, an expression vector or a plurality of expression vectors according to claim 7, a cell according to claim 8, or a composition according to claim 10, in the manufacture of a medicament for use in a method of treatment or prevention of a cancer.
- 14. A method of treating or preventing a cancer, comprising administering to a subject a therapeutically or prophylactically effective amount of an antigen-binding molecule according to any one of claims 1 to 4, a CAR according to claim 5, a nucleic acid or a plurality of nucleic acids according to claim 6, an expression vector or a plurality of expression vectors according to claim 7, a cell according to claim 8, or a composition according to claim 10.
- 15. The antigen-binding molecule, CAR, nucleic acid or plurality of nucleic acids, expression vector or plurality of expression vectors, cell or composition for use according to claim 11 or claim 12, the use according to claim 13 or the

- method according to claim 14, wherein the method additionally comprises administration of an inhibitor of signalling mediated by an EGFR family member, optionally wherein the inhibitor of signalling mediated by an EGFR family member is an inhibitor of signalling mediated by HER2 and/or EGFR.
- 16. The antigen-binding molecule, CAR, nucleic acid or plurality of nucleic acids, expression vector or plurality of expression vectors, cell or composition for use, the use or the method according to any one of claims 11 to claim 15, wherein the cancer is selected from: a cancer comprising cells expressing an EGFR family member, a cancer comprising cells expressing HER3, a solid tumor, breast cancer, breast carcinoma, ductal carcinoma, gastric cancer, gastric carcinoma, gastric adenocarcinoma, colorectal cancer, colorectal carcinoma, colorectal adenocarcinoma, head and neck cancer, squamous cell carcinoma of the head and neck (SCCHN), lung cancer, lung adenocarcinoma, squamous cell lung carcinoma, ovarian cancer, ovarian carcinoma, ovarian serous adenocarcinoma, kidney cancer, renal cell carcinoma, renal clear cell carcinoma, renal cell adenocarcinoma, renal papillary cell carcinoma, pancreatic cancer, pancreatic adenocarcinoma, pancreatic ductal adenocarcinoma, cervical cancer, cervical squamous cell carcinoma, skin cancer, melanoma, esophageal cancer, esophageal adenocarcinoma, liver cancer, hepatocellular carcinoma, cholangiocarcinoma, uterine cancer, uterine corpus endometrial carcinoma, thyroid cancer, thyroid carcinoma, pheochromocytoma, paraganglioma, bladder cancer, bladder urothelial carcinoma, prostate cancer, prostate adenocarcinoma, sarcoma and thymoma.
- 17. A method of inhibiting HER3-mediated signalling, comprising contacting HER3-expressing cells with an antigen-binding molecule according to any one of claims 1 to 4.
- 18. A method of reducing the number or activity of HER3-expressing cells, the method comprising contacting HER3-expressing cells with an antigen-binding molecule according to any one of claims 1 to 4.
- 19. An in vitro complex, optionally isolated, comprising an antigen-binding molecule according to any one of claims 1 to 4 bound to HER3.
- 20. A method comprising contacting a sample containing, or suspected to contain, HER3 with an antigen-binding molecule according to any one of claims 1 to 4, and detecting the formation of a complex of the antigen-binding molecule with HER3.
- 21. A method of selecting or stratifying a subject for treatment with a HER3-targeted agent, the method comprising contacting, in vitro, a sample from the subject with an antigen-binding molecule according to any one of claims 1 to 4 and detecting the formation of a complex of the antigen-binding molecule with HER3.
- 22. Use of an antigen-binding molecule according to any one of claims 1 to 4 as an in vitro or in vivo diagnostic or prognostic agent.
- 23. Use of an antigen-binding molecule according to any one of claims 1 to 4 in a method for detecting, localizing or imaging a cancer, optionally wherein the cancer is selected from: a cancer comprising cells expressing an EGFR family member, a cancer comprising cells expressing HER3, a solid tumor, breast cancer, breast carcinoma, ductal carcinoma, gastric cancer, gastric carcinoma, gastric adenocarcinoma, colorectal cancer, colorectal carcinoma, colorectal adenocarcinoma, head and neck cancer, squamous cell carcinoma